\*108081\*

Page 1

October-07-13 9:10:47 AM Accept Item ID: 646.3210 \*N900040100\* Setup Start Revision ID: Stop Item Name: Support 10/07/13 Start Qty: 5.00 **Cust Item ID:** Req'd Qty: 5.00 Required Date: 10/07/13 **Customer:** Run Process Plan: MLJ Date: 12-10-07 Tooling: Date: Stop QC: Date: SPC (Y/N): Date: Sequence ID/ Operation Reject Reject Insp. Set Up/ Tool ID Tool # Plan Accept Work Center ID Description Qty Number Stamp Code Qty **Run Hours Revision Nbr** Draw Nbr 646.3200 0.00 BAND SAW D.a 13/10/11 0.00 Memo Cut Blank at 10.35" Jeaspa Bandsaw 0.00 D.a 13/10/11 HAAS CNC VERTICAL MACHINING #1 SI 13-10-12 0.00 Memo CNC vertical machine #1 1-Machine per folio FB146 DWG REV: V FOLIO REV: 2- deburr and break all sharp edges

NCR: Y	es / No				WORK ORDER NON-O	CONF	ORN	MANCE / UPI	DATE				4
										QA Closed:	Da	ite:	
Work Orde	r:				DISPOSITION				AGAINST DE	PARTMENT	PROCESS		
				· · · · · ·	Rework	1		Skid-tube	Crosstube		Water Jet	Engineering	
Part N	o				Scrap	] [		Machining	Small Fab	4	d. Eng. Coor.	<del></del> -	-
NCR N	lo				Use-as-is Work Order Update	]   ]		noforming Large Fab	Finishing Composite	Rec/Sto	e/Packaging Supplier	<del></del>	
Root				Descri	ption of work order update	Init	tial	Act	tion	Sign &			
Cause	Date	Step	Qty		or Non-conformance	Chie	f Eng	Descr	ription	Date	Verificatio	on QC Inspec	tor
Doc/Data			1										
Equip/Tooling		1											
Operator													
Material	_												
Setup													
Other													
Process	_					1							
Supplier						1							
Training													
Unapproved						1	CATE	CORY					
					General	AULT	CATE	GURY					
Landir	n <b>g Gear</b> Bending				Bend		irain			Ovalized		Pressure/Force	, al
}	<b></b> i -	s Not Conce	ntric to		BOM/Route	<del></del>	ardwa	ro	-	Over/Under	toloranco	Temperature/C	
}	Cracks	NOT CONCE	illic to	<sup>0</sup> ′³ ⊢	Broken/Damaged	$\vdash$		on Incomplete		Part Incorre		Weld	Jure
}		I/Crimped		<u> </u>	Burrs	-	•	ions Incomplete/l	Inclear	Part Lost/Mi		Wrong Stock Pi	ullad
İ	Cuffs	i) Crimped		<u></u>	Contamination	$\boldsymbol{\vdash}$		enance	Dilcieal	Part Moved	22111B		inea
}	Heat Tr	eat		<u> </u>	Countersink	<del></del>	/islabe			Positioned V	Vrong		
		on Strip ir	Tuhe	<u> </u>	Cut Too Short	$\boldsymbol{\vdash}$	isiabe Iisreac		<del> </del>	Power Loss/	•	Other	
	Ripples	•		<b>⊢</b>	Drill Holes	_	offset	•	<u></u>	1. 044-0, 2033)	- wi &c	- Journey	
		Waves in	Extrusio	n	Drawing	$\vdash$		Calibration			<del></del>		
. 1													

Out of Sequence

Outside Dimensions

DQA:

Date:

Turning Sequence

Wave/Twist in Tube

Finish

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

October-07-13	9:10:47 AM		-	<u>:</u> .									
Item ID: Revision ID: Item Name:	646.3210 Support			Accept		*N900	<b>040</b>	1100	<b>)</b> *	Setup	Start Stop	*N:	S1* S2*
Start Date: Required Date: Reference:	10/07/13 10/07/13	Start Qty: 5.00 Req'd Qty: 5.00	*5* *5*			Cust Item I Customer:	D:	_			G		
Approvals:	Process Pla	ın:	Date:	Tooling:		Da	ate:		ļ	Run	Start	*NI	R1*
	QC:		Date:	SPC (Y/N)	):	Da	ate:				Stop	*N	R2*
Sequence ID/ Work Center II 120 *120* QC Quality Control	D .	Operation Description QC2- Inspect parts off m	achine FAI/FAIB	Set Up/ Run Ho 0.00		Tool ID	Tool#	Plan Code	Accept Qty	Rej Qty		Reject Number	Insp. Stamp
*130		QC8- Inspect parts - seco	and check	0.00	林	_13/10/13			5	Ø	5		
QC Quality Control		Memo		0.00									
<sup>140</sup> <b>*14</b> ∩*		Outsource process-Anod	ize per QSI017 4.1.10.1	0.00					C	· / / :	⊋/ <i>11</i>	<u>//8 (</u>	<b>3</b>
Outsource4 Outsource process -	Anodize	<b>Memo</b> Issue P/O to	atg: <u>21743</u>	0.00						<u> </u>	<u> </u>	<u> </u>	9)
		1- Black An	odize as per Dwg 646.320	0									
		2- PRIME A	AS PER DWG, SEE NOTE	: #2									
		Certification	n of Comformity is require	d									

											DQA:	Da	ate:	
NCR:	Yes	/ No				WORK ORDER NON-O	100	<b>NFORM</b>	ANCE / UPI	DATE				7
,									•		QA Closed	: Da	ate:	
Work Ord	or.					DISPOSITION				AGAINST DE	PARTMENT	PROCESS		
i viork Ord	٠٠٠.					Rework	1		Skid-tube	Crosstube	1	Water Jet		Engineering
Part I	No.					Scrap	1		Machining	Small Fab	Pro	d. Eng. Coor	—	Quality
	•					Use-as-is	1	1	noforming	Finishing	4	re/Packaging	-	Other
NCR I	No.					Work Order Update	1		Large Fab	Composite	1	Supplie	_	
		,												
Root						ption of work order update		nitial		tion	Sign &			
Cause		Date	Step	Qty	(	or Non-conformance	Ch	ief Eng	Descr	ription	Date	Verification	on	QC Inspector
Doc/Data	Ш						1							
Equip/Tooling	Ш							1						
Operator	Ш		1											
Material	Ш													
Setup	Ш													
Other	Ш	:												
Process								i						
Supplier	<u> </u>			•										
Training											•			
Unapproved		<u> </u>	<u> </u>		ļ									<u> </u>
							AUL	T CATE	GORY					
Landi	ing (	1			_	General	_	1		r	1		_	<b>.</b>
	$\vdash$	Bending			<u> </u>	Bend	$\vdash$	Grain		ļ	Ovalized		$\vdash$	Pressure/Forced
	$\vdash$	Centre N	ot Concei	ntric to	o/s	BOM/Route	igdash	Hardwa			Over/Unde		_	Temperature/Cure
	<u> </u>	Cracks			<u> </u>	Broken/Damaged	<u>_</u>	1	on Incomplete		Part Incorre		$\vdash$	Weld
	$\vdash$	Crushed/	Crimped			Burrs	$\vdash$	-	ions Incomplete/	Unclear	Part Lost/N	-		Wrong Stock Pulled
	$\vdash$	Cuffs			ļ	Contamination		Mainte		<u></u>	Part Moved			
	_	Heat Tre	at			Countersink		Mislabe	eled		Positioned '	_	_	7
		Inspection	n Strip in	Tube		Cut Too Short		Misreac	1		Power Loss	/Surge		Other

Offset

Out of Calibration

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Torque Waves in Extrusion

Drill Holes

Drawing

Finish

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Work Orde		108081		*	1080	)81*				······································		Page 3
Item ID: Revision ID: Item Name: Start Date:	646.3210 Support 10/07/13		*5*	Accept	•	*N900 Cust Item I		100	<b>)*</b> s	etup Start Stop	i Vi	S1* S2*
Required Date:	10/07/13		*5*			Customer:						
Reference:									•	S44	_	_
Approvals:	Process	Plan:	Date:	Tooling	g:	Da	ate:	·	K	Run Start	17	R1*
	QC:	<del>-</del> مر	Date:	SPC (Y	// <b>N</b> ):	Da	ate:			Stop	*N	R2*
Sequence ID/ Work Center II	D	Operation Description		Set U Run	Jp/ Hours	Tool ID	Tool #	Plan Code	Accept Qty		Reject Number	Insp. Stamp
150		Receive & Inspect for D	amage & Mat'l Certs	0.00						// /		_1
*150* Packaging		Memo		0.00						-13/4/	G-(-	<u>s</u>
Packaging										,		
					DAS <b>27</b>							
155		QC5- Inspect part comp	leteness to step on W/O	0.00	9-89				F			
*155*					1311,0	ملا			`			
QC		Memo		0.00								

180

Identify as per dwg & Stock Location: 87407 0.00

\*180\* Packaging

Quality Control

Packaging

Memo

0.00

\*\*\*IDENTIFY AS PER APICAL MPP-120 BY STAMPING P# AND REV\*\*\*

NCR:	Yes	/ No				WORK ORDER NON-O	100	NFORI\	MANCE / UPI	DATE			-
											QA Closed:	Date	:
Work Orde	or.					DISPOSITION				AGAINST DE	PARTMENT	/PROCESS	
Part I	•					Rework Scrap Use-as-is		ı	Skid-tube Machining oforming	Crosstube Small Fab Finishing	-1	Water Jet d. Eng. Coor. re/Packaging	Engineering Quality Other
NCR I	No.					Work Order Update		i	Large Fab	Composite	]	Supplier	
Root					Descri	ption of work order update		nitial	Act	ion	Sign &		
Cause		Date	Step	Qty	(	or Non-conformance	Ch	ief Eng	Descr	ription	Date	Verification	QC Inspector
Doc/Data Equip/Tooling Operator Material Setup Other Process Supplier Training Unapproved													
опарріочеа	1		J	<b>.</b>		F	AUL	T CATE	GORY			<u> </u>	
Landi	ng (	Gear				General							
		Bending Centre No Cracks Crushed/ Cuffs Heat Trea Inspectio	Crimped at		o/s	Bend BOM/Route Broken/Damaged Burrs Contamination Countersink Cut Too Short		4 '	on Incomplete ions Incomplete/i nance led	Jnclear	Ovalized Over/Under Part Incorre Part Lost/M Part Moved Positioned V	ct issing Vrong	Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled Other
1		Ripples ir	n Bend			Drill Holes	Г	Offset			_	_	

Out of Calibration

Out of Sequence

Outside Dimensions

DQA:

Date:

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drawing

Finish

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Work Orde				*108	R081*							Page 4
Revision ID:	646.3210 Support	)		Accept	*N900	040°	100	* Se	•	tart Stop	*N:	S1* S2*
Start Date: Required Date:	10/07/13 10/07/13		*5* *5*		Cust Item I Customer:	D:						
Reference:			.,									
Approvals:	Process	Plan:	Date:	Tooling:	Da	ate:		Rı		start	*N	R1*
	QC:		Date:	_ SPC (Y/N):	Da	ate:			3	Stop	*N	R2*
Sequence ID/ Work Center II	)	Operation  Description		Set Up/ Run Hours	Tool ID		Plan Code	Accept Qty	Rejec Qţy		Reject Number	Insp. Stamp
190		QC21- Final Inspection	- Work Order Release	0.00				$A \cap A$	1		, ,	
*190* QC Quality Control		Memo		0.00			~	A)	Kn	カ <i>1</i> 3	3/n/1\	

MF 120.7

											DQA:	Date	:
NCR:	Yes	/ No				WORK ORDER NON-	100	NFORM	ANCE / UPDA	ATE	·		•
											QA Closed:	Date	:
Work Ord	er.					DISPOSITION				AGAINST DE	PARTMENT	/PROCESS	
Part I	No.					Rework Scrap Use-as-is Work Order Update		Therm	Machining noforming	Crosstube Small Fab Finishing Composite		Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other
Root					Descri	ption of work order update		Initial	Actio	n	Sign &		
Cause		Date	Step	Qty	(	or Non-conformance	Ch	nief Eng	Descrip	tion	Date	Verification	QC Inspector
Doc/Data Equip/Tooling Operator Material Setup Other Process Supplier Training Unapproved													
					-	F	AUI	LT CATE	GORY				
Landi		Gear Bending				General Bend		Grain			Ovalized		Pressure/Forced
	-	Centre N	ot Conce	ntric to (	)/s	BOM/Route	$\vdash$	Hardwa	ro	<b>—</b>	Ovanzeu Over/Under	tolerance	Temperature/Cure
		Cracks	ot conce	intric to t		Broken/Damaged		-1	on Incomplete		Part Incorre	<u> </u>	Weld
		Crushed/	Crimped		L	Burrs		Instruct	ions Incomplete/Und	clear	Part Lost/Mi	ssing	Wrong Stock Pulled
		Cuffs			_	Contamination		Mainte	enance		Part Moved		
		Heat Tre	at .			Countersink		Mislabe	eled		Positioned V		_
		Inspectio	n Strip in	Tube		Cut Too Short		Misread	<del>1</del>		Power Loss/	Surge	Other
	1	Ripples in	n Bend			Drill Holes		Offset					

Out of Calibration

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drawing

Finish

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

October-07-13 9:10:47 AM

Work Order ID:

108081

Parent Item:

646.3210

Parent Item Name:

Support

**Start Date:** 10/07/13

Required Date: 10/07/13

Start Qty: 5.00

Required Qty: 5.00

~				
( ')	nm	m	en	ts:

IPP REV:A NEW ISSUE 12-11-09 JLM VERIFIED BY:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
<b>M7075T6B6.000X1.000</b> 7075-T6 BAR 6.000" X 1.	000"	Purchased	No				f	14.0130		4.536842	<b>り</b> ・セ	13	10/11

<u>Location</u>	Loc Oty	Loc Code	
MAT001	14.013		دع م
<b>124030</b>	6.013		4.5368 FT
125554	8		

												DQA:	D	ate:	
NCR:	<b>Yes</b>	/ No				WORK ORDER NON-	COI	NFORM	ANCE / UP	DATE		•			*
											Q/	A Closed:	D	ate:	
Work Orde	er.					DISPOSITION				AGAINST D	EPA	RTMENT	PROCESS		
Part N	No				· · · · · · · · · · · · · · · · · · ·	Rework Scrap Use-as-is Work Order Update		Therm	Skid-tube Machining noforming Large Fab	Crosstube Small Fab Finishing Composite			Water Je d. Eng. Coor e/Packaging Supplie		Engineering Quality Other
Root		•			Descri	otion of work order update	1	Initial	Act	tion		Sign &			-
Cause		Date	Step	Qty	C	r Non-conformance	Ch	nief Eng	Desc	ription	$\perp$	Date	Verification	on	QC Inspector
Doc/Data Equip/Tooling Operator Material Setup Other Process Supplier Training Unapproved									·						
				•			AUI	LT CATE	GORY						
Landi		Bending Centre No Cracks Crushed/ Cuffs Heat Trea Inspectio	Crimped at n Strip in		/s	General Bend BOM/Route Broken/Damaged Burrs Contamination Countersink Cut Too Short		Instruct Mainte Mislabe Misread	on Incomplete ions Incomplete/i nance led	Unclear	Pa Pa Pa Pa	valized ver/Under art Incorrec art Lost/Mi art Moved ositioned W ower Loss/S	et ssing Vrong		Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled Other
		Ripples in	Bend			Drill Holes	١.	Offset							

Out of Calibration

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drawing

Finish

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

DART AEROSPACE LTD	Work Order: /	08081
Description: Support	Part Number: 64	0-3210
Inspection Dwg:646_3200 Rev: 11/C		Page 1 of 1

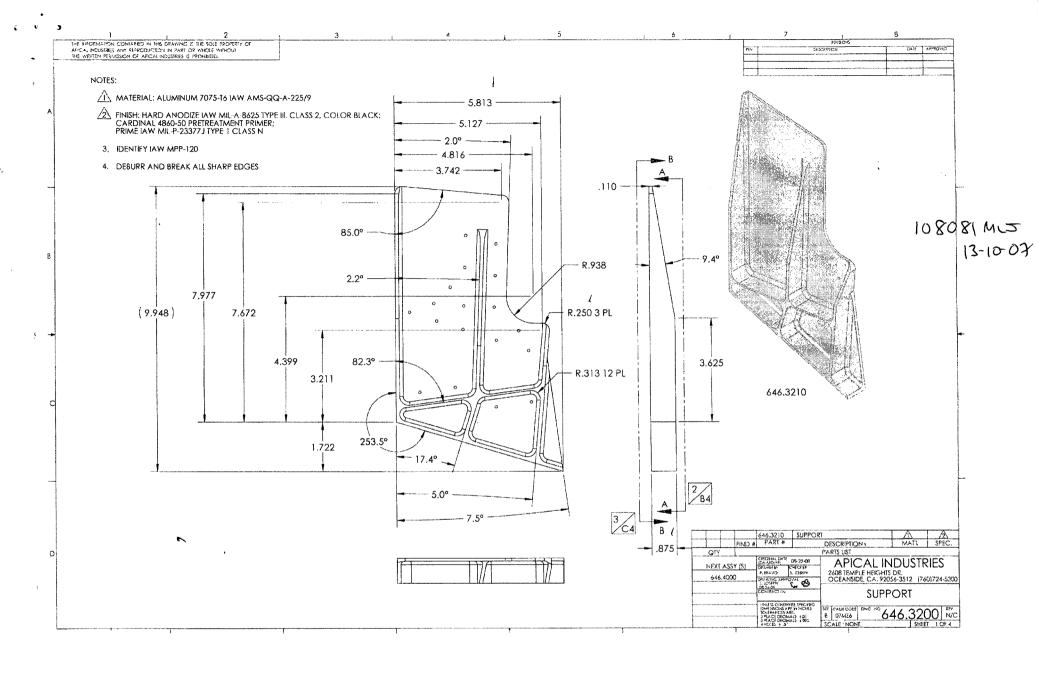
## FIRST ARTICLE INSPECTION CHECKLIST

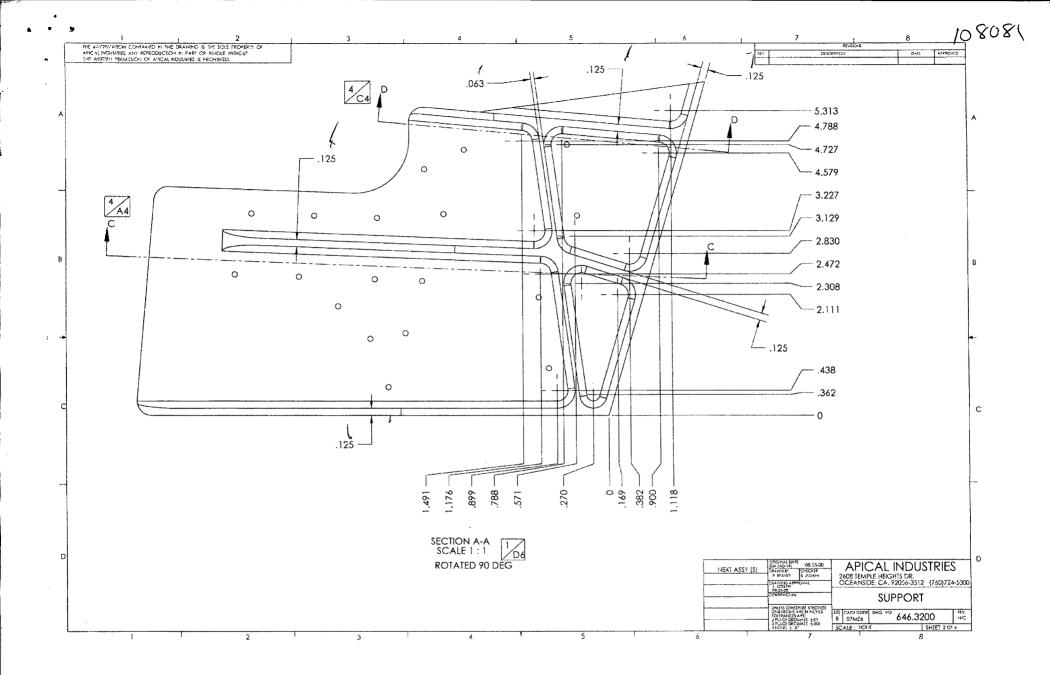
Drawing	Tolerance	Actual	Accept	Reject	Method of	Comments
Dimension		Dimension		Inspection		
5.813	±-005	5.812			HG	
R. 250	±.005	250				
12313	±-60×	313				
-875	-:00-	-880			New	SL-10
- 063	1-005	.062			^	
-125	005	1_123			_	
-125	005	-123			-	
-125	+ -005	1-125			۲	
-125	± 665	124				
-495	1005	_494			~	
-825	+-005	-824	/		``	
Ø.094	1 · · · ODI	-095			•	
3.526	± -002	3.526			•	
4,728	005	4.727				
-700	±-005	700			HG	
1-040	-005	1-039			~	
3.840	+-605	3,839			_	
6-222	±-005	6-222			/	
-100	±-005	-103			Vein	10 اــالا
-775	=.005	1.773			~	
R125	005	-125	/			
					-	

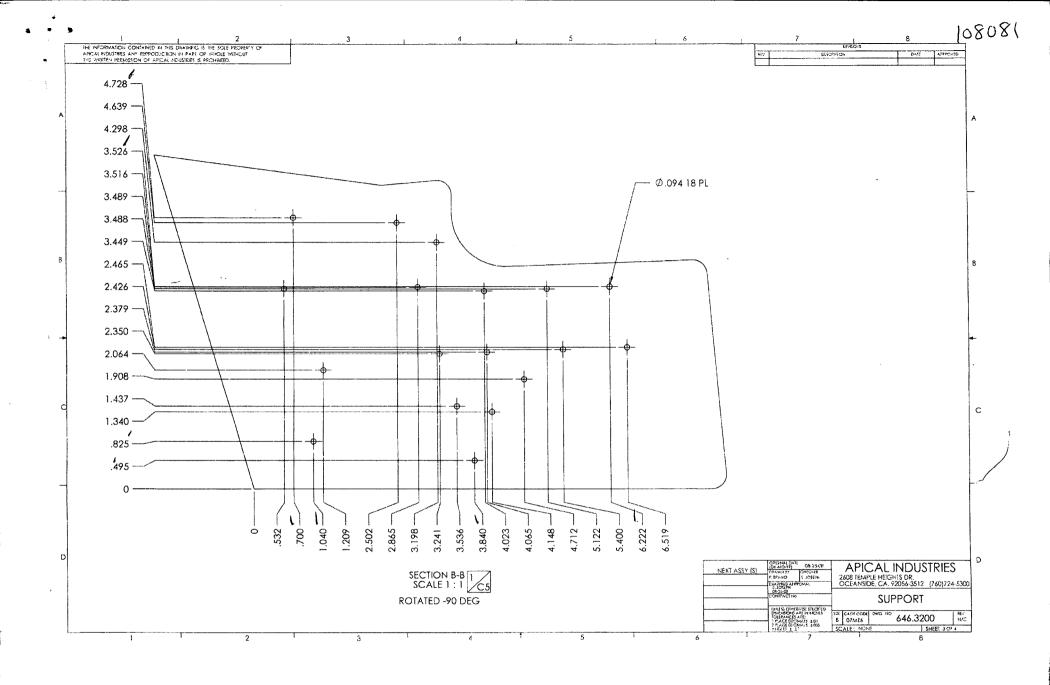
Measured by:	12	Audited by:	FX_	Preliminary Approval:	
Date:	13-10-12	Date:	13/10/13	Date:	

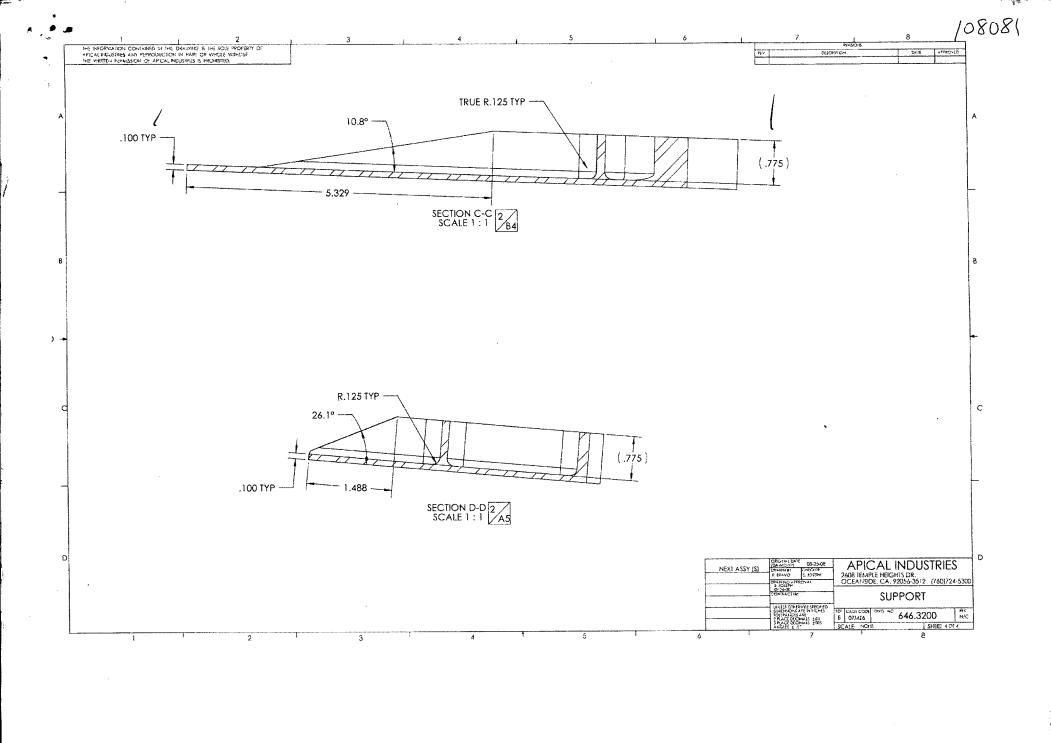
Rev	Date	Change	Revised by	Approved
E	10.04.14	Added preliminary approval	KJ	

N 10.04.15











A.T.G. Industries Inc. 731, rue Industrielle Rd. PLATING DEPARTMENT Rockland, On K4K 1T2 Canada

Ph: (613) 446-4544 Fax: (613) 446-4556

## Pack List

Number: 62723

Date: 06-Nov-13

To

DART AEROSPACE LTD 1270 ABERDEEN ST. HAWKESBURY, ON K6A 1K7 Canada Ship To

DART AEROSPACE LTD 1270 ABERDEEN ST. HAWKESBURY, ON K6A 1K7

Canada

Ph: 613-632-5200

Fax: 613-632-1185

Ph: 613-632-5200

Fax: 613-632-1185

Terms		Ship Via					
Quantity	Description						
1			Rev:				
lot	f .	/					
	PCS 41232-200-002-005 (1.25) (ALREADY SHIPPED 31/10/13)						
	BLACK ANODIZE MIL-A-8625 TYPE II CLASS 2						
	5 PCS 646.3210 (12.20) 21 PCS 646.37 (15.75) 26 PCS 646.3810 (6.55) 18 PCS 646.3811 (6.55)						
	HARD ANODIZE BLACK MIL-A-8625 TYPE III CLASS 2						
	PRIME MIL-P-23377J TYPE I CLA	SS N					
	PRICE IS PER PIECE Job: 20130688	PO: 21743	Line: -				
	Certificate of Cor	nformance					
A.T.G. Industries certifies that all items in this shipment are in conformance with all requirements, specifications and drawings referenced in the purchase order.							
ISO 9001 : 2008 REGISTERED ATG SALES-2010 TERMS APPLY							
	DATE 6/1//13		÷				
	CERTIFIED SIGNATURE :						
	RECEIVER SIGNATURE :						
			•				
			·				